

Grant Recipient Report

Steel Professor Grant

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The Materials and Manufacturing Group (MMG) at Penn State Behrend hosted seven in-person general body meetings during the 2022–2023 school year. The general body meetings provide student members with a meal, updates on upcoming manufacturing scholarship opportunities, manufacturing internship, co-op and full-time job announcements; and announcements of upcoming local American Foundry Society (AFS) and AIST dinner meetings, manufacturing tours, and manufacturing career fairs.

The AIST Steel Professor Award has provided the resources necessary to help fund some of the meals and MMG giveaways at general body meetings. At all meetings, a free raffle is held to give students manufacturing company-donated hats, shirts, polo shirts, coolers, mugs, blankets, and anything else company partners give to MMG for distribution to the students. Industry speakers and faculty members provide a presentation on technical and/or educational topics at all general body meetings.

The Behrend MMG chapter was able to travel to Cleveland-Cliffs, Urick Ductile Solutions, Eriez Mfg. (Magnetics) and Electric Materials during the 2022–2023 year.

An important part of making connections with steel companies and suppliers is attending technical conferences and meetings. The maximum amount that can be spent on faculty professional development (travel to conferences, equipment purchases, etc.) is generally limited to US\$2,000 per year for any faculty member in the School of Engineering at Penn State Behrend. This award allowed for the attendance of students at a



number of events this year. This is not only necessary for presenting research and expanding knowledge but also for networking and making connections with manufacturing companies and suppliers. It is also an effective tool for growing student interest in manufacturing and helping students make connections to continue to expand MMG student internship and co-op opportunities.

The Penn State Behrend Materials and Manufacturing Group attended AISTech in May 2023, the Foundry Educational Conference in November 2022, and the SFSA Cast in Steel Spear Competition (and AFS Casting Congress) in April 2023. A team of MMG students competed in the 2023 SFSA Cast In Steel African Spear Competition. The students worked with PRL Regal Cast and Urick Ductile Solutions to design and manufacture high-strength, low-alloy steel African spears. ♦